

GP 2811

Please type a plus sign (+) inside this box →

Approved for use through 09/30/2000. OMB 0651-0031  
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

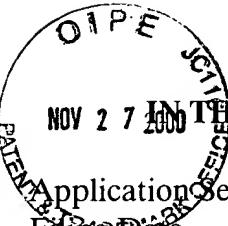
<b>TRANSMITTAL FORM</b> <small>(Now used for all correspondence after initial filing)</small>		<b>Application Number</b> 09/652,550
		<b>Filing Date</b> August 31, 2000
		<b>First Named Inventor</b> Keiji Jono
		<b>Group Art Unit</b> 2811
		<b>Examiner Name</b> Unknown
<b>Total Number of Pages in This Submission</b> 18	<b>Attorney Docket Number</b> KM1-001	

ENCLOSURES (check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Response <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition Routing Slip (PTO/SB/69) and Accompanying Petition <input type="checkbox"/> Petition to Convert to a Provisional Application TWO <input checked="" type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> KMT & MICRON Terminal Disclaimer <input type="checkbox"/> Small Entity Statement <input type="checkbox"/> Request for Refund	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Additional Enclosure(s) (please identify below): <div style="border: 1px solid black; padding: 5px; width: fit-content;">Postcard.</div>
	<b>Remarks</b> No fees required.	
The Commissioner is hereby authorized to charge any additional fees required under 37 CFR Sections 1.16 and 1.17 and credit any overpayments to: 23-0925.		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Frederick M. Fliegel, Ph.D., Reg. No. 36,138 Wells, St. John, Roberts, Gregory & Matkin P.S. Customer No. 021567
Signature	
Date	Nov. 21, 2000

CERTIFICATE OF MAILING		
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on this date: <u>11/21/00</u>		
Typed or printed name	Robin Saldivia	Date
Signature		11/21/00

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be send to the Chief Information Officer Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



1 NOV 27 2000 IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#5/Power attorney  
1/12/01  
VS

2 Application Serial No. .... 09/652,550  
3 Filing Date ..... August 31, 2000  
4 Inventor ..... Keiji Jono et al.  
5 Assignee ..... Micron Technology, Inc. and KMT Semiconductor, Ltd.  
6 Group Art Unit ..... 2811  
7 Examiner ..... Unknown  
8 Attorney's Docket No. ..... KM1-001  
Title: Methods of Forming an Isolation Trench in a Semiconductor, Methods of  
Forming an Isolation Trench in a Surface of a Silicon Wafer, Methods of  
Forming an Isolation Trench-Isolated Transistor, Trench-Isolated Transistor,  
Trench Isolation Structures Formed in a Semiconductor, Memory Cells and  
DRAMS

RECEIVED

DEC 05 2000

TECHNOLOGY CENTER 2800

9 **POWER OF ATTORNEY BY ASSIGNEE AND**  
**CERTIFICATE BY ASSIGNEE UNDER 37 CFR §3.73(b)**

10  
11 To: Assistant Commissioner for Patents  
Washington, D.C. 20231

12  
13 Sir:

14 MICRON TECHNOLOGY, INC., a joint Assignee of part of the entire  
15 right, title and interest in the above-identified patent application by assignment  
16 attached hereto, hereby appoints the attorneys and agents of the firm of  
17 WELLS, ST. JOHN, ROBERTS, GREGORY & MATKIN P.S., listed as  
18 follows:

19	David P. Roberts	Reg. No. 23,032
20	Randy A. Gregory	Reg. No. 30,386
21	Mark S. Matkin	Reg. No. 32,268
22	James L. Price	Reg. No. 27,376
23	Deepak Malhotra	Reg. No. 33,560
	Mark W. Hendrickson	Reg. No. 32,356
	David G. Latwesen	Reg. No. 38,533
	George G. Grigel	Reg. No. 31,166
	Keith D. Grzelak	Reg. No. 37,144



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application Serial No. .... 09/652,550  
Filing Date ..... August 31, 2000  
Inventor ..... Keiji Jono et al.  
Assignee ..... Micron Technology, Inc. and KMT Semiconductor, Ltd.  
Group Art Unit ..... 2811  
Examiner ..... Unknown  
Attorney's Docket No. .... KM1-001  
Title: Methods of Forming an Isolation Trench in a Semiconductor, Methods of  
Forming an Isolation Trench in a Surface of a Silicon Wafer, Methods of  
Forming an Isolation Trench-Isolated Transistor, Trench-Isolated Transistor,  
Trench Isolation Structures Formed in a Semiconductor, Memory Cells and  
DRAMS

**POWER OF ATTORNEY BY ASSIGNEE AND**  
**CERTIFICATE BY ASSIGNEE UNDER 37 CFR §3.73(b)**

To: Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

KMT SEMICONDUCTOR, LTD., a joint Assignee of part of the entire  
right, title and interest in the above-identified patent application by assignment  
attached hereto, hereby appoints the attorneys and agents of the firm of  
WELLS, ST. JOHN, ROBERTS, GREGORY & MATKIN P.S., listed as  
follows:

David P. Roberts	Reg. No. 23,032
Randy A. Gregory	Reg. No. 30,386
Mark S. Matkin	Reg. No. 32,268
James L. Price	Reg. No. 27,376
Deepak Malhotra	Reg. No. 33,560
Mark W. Hendrickson	Reg. No. 32,356
David G. Latwesen	Reg. No. 38,533
George G. Grigel	Reg. No. 31,166
Keith D. Grzelak	Reg. No. 37,144

1                   James D. Shaurette                   Reg. No. 39,833  
2                   Frederick M. Fliegel               Reg. No. 36,138  
3                   Donald Brent Kenady               Reg. No. 40,045  
4                   James E. Lake                       Reg. No. 44,854  
5                   Bernard Berman                     Reg. No. 37,279

6 and also attorneys Michael L. Lynch (Reg. No. 30,871) and  
7 Lia Pappas Dennison (Reg. No. 34,095) of Micron Technology, Inc., as its  
8 attorneys with full power of substitution to prosecute this application and  
9 transact all business in the Patent and Trademark Office connected therewith.

10                  The Assignee certifies that the above-identified Assignment has been  
11 reviewed and to the best of Assignee's knowledge and belief, joint title is in  
12 the Assignee, and a copy of the Assignment is submitted herewith.

13                  Please direct all correspondence regarding this application to:

14                  Customer No. 021567  
15                  Wells, St. John, Roberts, Gregory & Matkin P.S.  
16                  Attn: Frederick M. Fliegel, Ph.D.  
17                  601 W. First Avenue, Suite 1300  
18                  Spokane, WA 99201-3828

19                  Telephone: (509) 624-4276  
20                  Facsimile: (509) 838-3424

21                  KMT SEMICONDUCTOR, LTD.

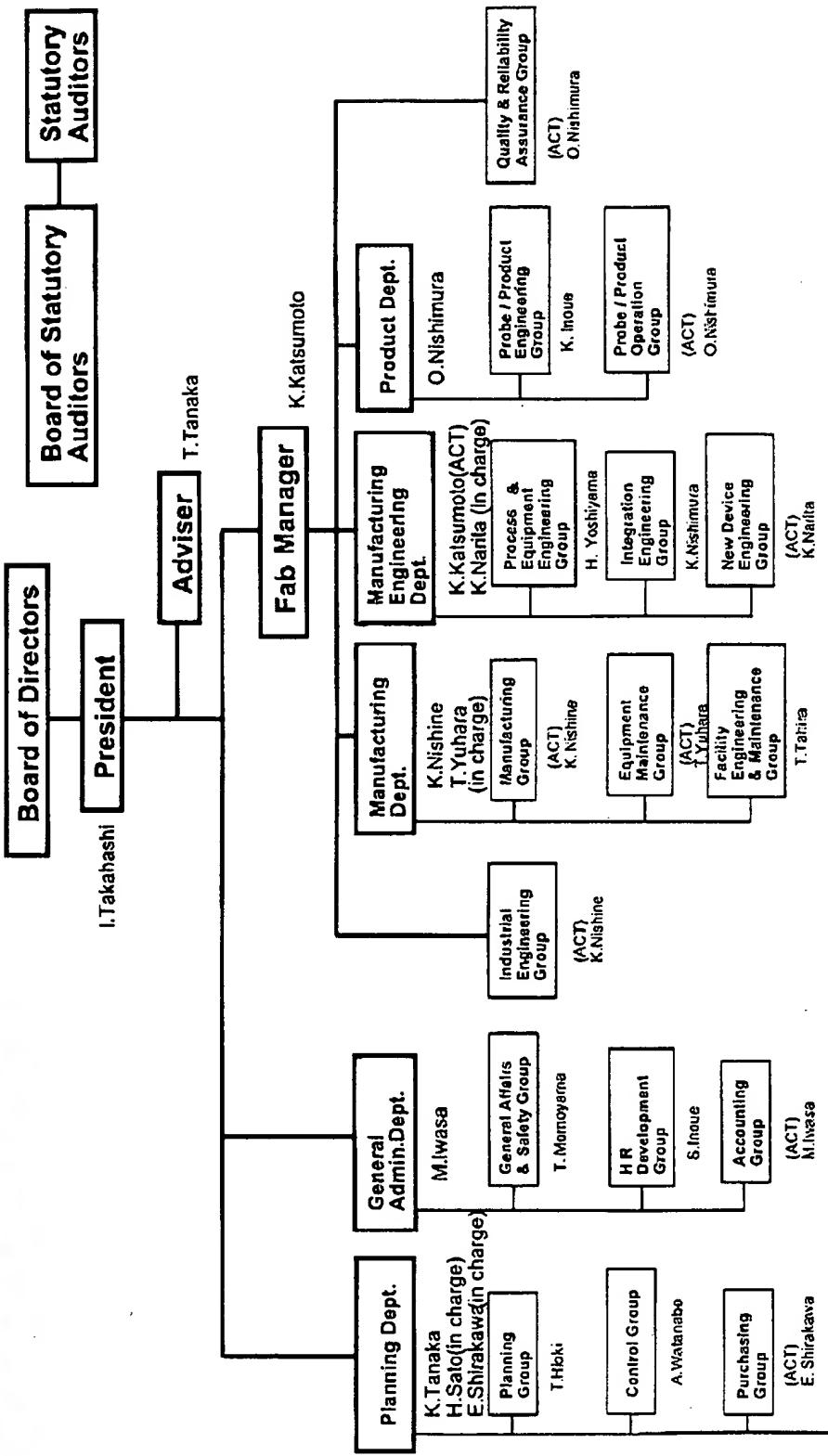
22                  Dated: Nov 06, 2000

23                  By: Ken-ichi Katsumoto  
24                  Name: Ken-ichi Katsumoto  
25                  Title: Board of Director

26                  Attachments: Copy of Assignment and KMT Organization Chart

4

## KMT Organization Chart



Jul 1st, 2000

KMT Strictly Private

## **ASSIGNMENT**

**PARTIES TO THE ASSIGNMENT:**

INVENTORS:

KEIJI JONO

HIROKAZU UEDA

HIROYUKI WATANABE

**JOINT ASSIGNEES:**

Micron Technology, Inc.  
Corporation of the State of Delaware  
8000 South Federal Way  
Boise, Idaho 83716

and

KMT Semiconductor, Ltd.  
A Japanese Corporation  
302-2, Hirano-cho, Nishiwaki-shi  
HYOGO  
677-0063 JAPAN

## **BACKGROUND OF THIS ASSIGNMENT:**

INVENTORS have conceived certain new and useful inventions disclosed in a United States Patent Application Serial No. 09/652,550, filed August 31, 2000, titled Methods of Forming an Isolation Trench in a Semiconductor, Methods of Forming an Isolation Trench in a Surface of a Silicon Wafer, Methods of Forming an Isolation Trench-Isolated Transistor, Trench-Isolated Transistor, Trench Isolation Structures Formed in a Semiconductor, Memory Cells and DRAMS.

**RECEIVED**  
DEC 05 2000  
**TECHNOLOGY CENTER 2800**

1           MICRON TECHNOLOGY, INC. desires to acquire part of the entire  
2 right, title and interest in said inventions and with respect to any Letters  
3 Patent that may be granted with respect to the inventions in both the United  
4 States and in all foreign countries.

5           KMT SEMICONDUCTOR, LTD. desires to acquire part of the entire  
6 right, title and interest in said inventions and with respect to any Letters  
7 Patent that may be granted with respect to the inventions in both the United  
8 States and in all foreign countries.

9           THE PARTIES AGREE AS FOLLOWS:

10          In consideration of good and valuable consideration, the receipt  
11 sufficiency and adequacy of which is hereby acknowledged, INVENTORS  
12 hereby sell, assign and transfer to MICRON TECHNOLOGY, INC. and to  
13 KMT SEMICONDUCTOR, LTD. the entire right, title and interest in the  
14 above-identified application executed currently with this assignment and to any  
15 reissues, renewals, divisions or continuations thereof, and hereby authorizes the  
16 Commissioner of Patents and Trademarks to issue such Letters Patent to  
17 MICRON TECHNOLOGY, INC. and to KMT SEMICONDUCTOR, LTD. for  
18 the joint use of MICRON TECHNOLOGY, INC. and KMT  
19 SEMICONDUCTOR, LTD., its successors or assigns.

20          INVENTORS further agree to execute, at the request and expense of  
21 MICRON TECHNOLOGY, INC. or KMT SEMICONDUCTOR, LTD. such  
22 other formal documents as may be required to fully convey the interest

1 transferred herein and will similarly execute any application papers required  
2 for the filing of any division, continuation, renewal or reissue of the patent  
3 application or resulting Letters Patent; and will generally do everything  
4 necessary or desirable to obtain and enforce proper protection for the  
5 inventions assigned hereby.

6 INVENTORS further assign to MICRON TECHNOLOGY, INC. and  
7 to KMT SEMICONDUCTOR, LTD. the whole right, title and interest in the  
8 inventions disclosed in the application throughout all countries foreign to the  
9 United States. MICRON TECHNOLOGY, INC. and KMT  
10 SEMICONDUCTOR, LTD. are hereby authorized to apply for patents relating  
11 to the inventions in their own names in countries where such procedure is  
12 proper; to claim the benefit of the International Convention; to file and  
13 prosecute International Applications relating to the inventions under the  
14 Patent Cooperation Treaty; and to file and prosecute applications relating to  
15 the inventions under the European Patent Convention. INVENTORS agree  
16 to execute applications relating to the inventions in those countries and under  
17 those conventions where it is necessary that the same be executed by the  
18 inventor, and to execute assignments of such applications and the resulting  
19 Letters Patent to MICRON TECHNOLOGY, INC. and to KMT  
20 SEMICONDUCTOR, LTD. as well as all other necessary papers in relation  
21 to such applications and Letters Patent.

1 INVENTORS further warrant and covenant that no assignment, grant,  
2 mortgage, license or other agreement affecting the rights and property herein  
3 conveyed has been or will be made to others by the undersigned, and that the  
4 full rights to convey the same as herein expressed is possessed by the  
5 undersigned.

6 To be binding on the heirs, assigns, representatives and successors of  
7 the undersigned and extend to the successors, assigns and nominees of the  
8 Assignees.

9 (Signature) Keiji Jono Date: 10-31-2000  
10 KEIJI JONO

11 State of \_\_\_\_\_ )  
12 County of \_\_\_\_\_ ) ss.  
13 BEFORE ME, this \_\_\_\_\_ day of \_\_\_\_\_ 2000, personally appeared  
14 the above-named inventor, to me known to be the person who is described in  
15 and who executed the foregoing assignment instrument and acknowledged to  
16 me that he/she executed the same of his/her own free will for the purpose  
17 therein expressed.

18 SEAL

19 Notary or Consular Officer  
20 My Commission Expires: \_\_\_\_\_

1 (Signature) Hirokazu Ueda Date: 10-31-00  
HIROKAZU UEDA

2 State of \_\_\_\_\_  
3 \_\_\_\_\_ ) ss.  
4 County of \_\_\_\_\_)

5 BEFORE ME, this \_\_\_\_\_ day of \_\_\_\_\_ 2000, personally appeared  
6 the above-named inventor, to me known to be the person who is described in  
and who executed the foregoing assignment instrument and acknowledged to  
me that he/she executed the same of his/her own free will for the purpose  
therein expressed.

7  
8 SEAL

9  
10 Notary or Consular Officer  
11 My Commission Expires: \_\_\_\_\_

12 (Signature) Hiroyuki Watanabe Date: 10-31-2000  
13 HIROYUKI WATANABE

14 State of \_\_\_\_\_  
15 \_\_\_\_\_ ) ss.  
County of \_\_\_\_\_)

16 BEFORE ME, this \_\_\_\_\_ day of \_\_\_\_\_ 2000, personally appeared  
17 the above-named inventor, to me known to be the person who is described in  
and who executed the foregoing assignment instrument and acknowledged to  
me that he/she executed the same of his/her own free will for the purpose  
therein expressed.

18  
19 SEAL

20  
21 Notary or Consular Officer  
22 My Commission Expires: \_\_\_\_\_

1                   James D. Shaurette                   Reg. No. 39,833  
2                   Frederick M. Fliegel               Reg. No. 36,138  
3                   Donald Brent Kenady               Reg. No. 40,045  
4                   James E. Lake                       Reg. No. 44,854  
5                   Bernard Berman                     Reg. No. 37,279

6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
and also attorneys Michael L. Lynch (Reg. No. 30,871) and  
Lia Pappas Dennison (Reg. No. 34,095) of Micron Technology, Inc., as its  
attorneys with full power of substitution to prosecute this application and  
transact all business in the Patent and Trademark Office connected therewith.

The Assignee certifies that the above-identified Assignment has been  
reviewed and to the best of Assignee's knowledge and belief, joint title is in  
the Assignee, and a copy of the Assignment is submitted herewith.

Please direct all correspondence regarding this application to:

Customer No. 021567  
Wells, St. John, Roberts, Gregory & Matkin P.S.  
Attn: Frederick M. Fliegel, Ph.D.  
601 W. First Avenue, Suite 1300  
Spokane, WA 99201-3828

Telephone: (509) 624-4276  
Facsimile: (509) 838-3424

MICRON TECHNOLOGY, INC.

Dated: 11/9/00

By: 

Name: Michael L. Lynch, Esq.  
Title: Chief Patent Counsel

Attachments: Copy of Assignment; Copy of Board of Directors' Resolution

MICRON TECHNOLOGY, INC.  
CERTIFIED COPY OF RESOLUTIONS



RECEIVED  
DEC 05 2000  
TECHNOLOGY CENTER 2800

I, Jan R. Reimer, the Assistant Secretary of Micron Technology, Inc. do hereby certify, that the resolutions attached hereto represent a complete, true and correct copy of the resolutions duly adopted by the Board of Directors of Micron Technology, Inc., a corporation duly organized and existing under the laws of the State of Delaware, at a meeting duly held on March 25, 1996, a quorum being present, and have been entered into the minutes of said meeting; that I am the keeper of the corporate seal and of the minutes and records of this Corporation; and that the said resolutions have not been rescinded or modified.

The resolutions attached hereto are in conformity with the Articles of Incorporation and Bylaws of the Corporation and are now in full force and effect.

I further certify that the person whose name and signature is set out below is the person authorized to act for said corporation in transactions with and pursuant to the foregoing resolutions, and that such person is now duly qualified and acting in his respective capacity:

NAME AND TITLE

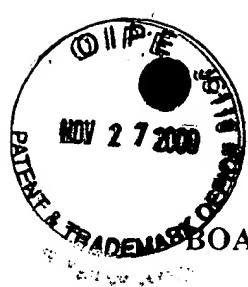
SIGNATURE

Michael L. Lynch, Assistant General  
Counsel for Intellectual Property

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed the seal of the said corporation, this 16th day of May, 1996.

Jan R. Reimer, Assistant Secretary

(SEAL)



MICRON TECHNOLOGY, INC.  
BOARD OF DIRECTORS RESOLUTIONS

RECEIVED  
DEC 05 2000  
TECHNOLOGY CENTER 2800

WHEREAS, certain key employees require the authority to execute certain documents on behalf of the Company in order to enable them to effectively and efficiently carry out their responsibilities and duties to the Company.

NOW THEREFORE BE IT RESOLVED, that the Board hereby approves and authorizes Mr. Michael L. Lynch, Assistant General Counsel for Intellectual Property, to execute on behalf of the Company, documents pertaining to the Company's patent prosecution matters, including but not limited to documents relating to representation before a patent examining authority, patent terms and other patent prosecution procedures, both in the United States and other countries, upon such terms and conditions as the General Counsel of the Company shall deem necessary or appropriate.

1 (Signature) Hirokazu Ueda Date: 10-31-00  
HIROKAZU UEDA

2 State of \_\_\_\_\_ )  
3 ) ss.  
4 County of \_\_\_\_\_ )

5 BEFORE ME, this \_\_\_\_\_ day of \_\_\_\_\_ 2000, personally appeared  
6 the above-named inventor, to me known to be the person who is described in  
and who executed the foregoing assignment instrument and acknowledged to  
me that he/she executed the same of his/her own free will for the purpose  
therein expressed.

7  
8 SEAL

9  
10 Notary or Consular Officer  
11 My Commission Expires: \_\_\_\_\_

12 (Signature) Hiroyuki Watanabe Date: 10-31-2000  
13 HIROYUKI WATANABE

14 State of \_\_\_\_\_ )  
15 ) ss.  
16 County of \_\_\_\_\_ )

17 BEFORE ME, this \_\_\_\_\_ day of \_\_\_\_\_ 2000, personally appeared  
18 the above-named inventor, to me known to be the person who is described in  
and who executed the foregoing assignment instrument and acknowledged to  
me that he/she executed the same of his/her own free will for the purpose  
therein expressed.

19  
20 SEAL

21 Notary or Consular Officer  
22 My Commission Expires: \_\_\_\_\_